REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

At the outset, the undersigned and Mr. Ebata, a representative of the assignee, express appreciation to Examiner Deak for her time and attention during the interview that was conducted at the U.S. Patent and Trademark Office on December 1, 2004. The remarks below discuss the substance of the interview.

The subject matter of this application pertains to a blood reservoir and a method of introducing blood into a blood reservoir. As discussed during the interview as well as the prior response, the background portion of the present application describes known extracorporeal blood circulation systems, noting that they typically include a main circuit having a blood return line from large veins and a blood return line to the arterial system, a suction circuit for suctioning blood accumulated in the surgical field, and a vent circuit for suctioning blood accumulated in the heart. In the suction and vent circuits, suctioned blood that is suctioned from the surgical field outside the heart and vented blood suctioned from the interior of the heart are introduced into a blood reservoir (i.e., a cardiotomy reservoir) for temporarily storing such blood. The blood that is suctioned from outside of the heart can generally contain relatively large amounts of foreign substances while the blood that is vented from the interior of the heart typically has a relatively small amount of such foreign substances.

As further discussed in the background portion of this application, known blood reservoirs or cardiotomy reservoirs used in extracorporeal blood circulation systems are constructed so that the blood suctioned from outside the heart and the

blood vented from the heart interior are filtered in such a way that the vented blood that is vented from the interior of the heart can contact foreign substances filtered off from the suctioned blood that is suctioned from outside the heart. Thus, the vented blood is needlessly subjected to the potential of contacting foreign substances filtered off from the suctioned blood.

As discussed during the interview, independent Claim 28 is directed to a method of introducing blood into a blood reservoir that comprises a housing having a vented blood inlet, a suctioned blood inlet, a blood outlet and a filtering unit for filtering blood flowing into the housing. The method involves introducing blood vented from the interior of a heart into a vented blood filtering chamber in the housing by way of the vented blood inlet and introducing blood suctioned from outside the heart into a suctioned blood filtering chamber in the housing by way of the suctioned blood inlet, with the vented blood introduced into the vented blood filtering chamber by way of the vented blood inlet not including suctioned blood suctioned from outside the heart.

As further discussed during the interview, U.S. Patent No. 5,800,721 to *McBride* discloses a combined cardiotomy fluid and venous blood reservoir. As generally illustrated in Fig. 9, cardiotomy fluid is introduced into an inlet 32 of the reservoir while venous blood is introduced into an inlet 34 of the reservoir. The reservoir is constructed so that the cardiotomy fluid introduced into the inlet 32 passes through a filter/de-foamer element 152, passes through a de-foamer element 158 and then flows out through the outlet 20. On the other hand, the venous blood introduced through the inlet 34 passes through the de-foamer element 158 and then out through the outlet 20. As pointed out during the interview, *McBride* discusses at

the top of column 1 that the cardiotomy fluid introduced into the reservoir by way of the inlet 32 refers to blood and other body fluid obtained from a surgical site, while the venous blood introduced into the reservoir by way of the inlet 34 refers to blood from the circulatory system.

Thus, as explained during the interview, *McBride* does not disclose a method of introducing blood into a blood reservoir that involves introducing blood vented from the interior of the heart into a vented blood filtering chamber in the housing by way of a vented blood inlet and introducing blood suctioned from outside the heart into a suctioned blood filtering chamber in the housing by way of a suctioned blood inlet, with the vented blood introduced into the vented blood filtering chamber by way of the vented blood inlet not including suctioned blood suctioned from outside the heart. As noted during the interview, *McBride* is not at all concerned about the potential that vented blood vented from the interior of the heart may contact foreign substances filtered off from the suctioned blood that is suctioned from outside the heart. It is thus apparent that *McBride* does not describe introducing vented blood from the interior of the heart into a vented blood filtering chamber, wherein the vented blood does not include suctioned blood from outside the heart. Indeed, as mentioned during the interview, the statement in *McBride* that the cardiotomy fluid introduced into the reservoir by way of the inlet 32 refers to blood and other body fluid obtained from the surgical site indicates that the cardiotomy fluid includes both blood from the interior of the heart and blood from outside the heart. Accordingly, as agreed by Examiner Deak, the claimed method recited in Claim 28 is patentably distinguishable over the disclosure contained in *McBride*.

The discussions during the interview also involved independent Claims 14 and 27 directed to the blood reservoir. Examiner Deak noted that the recitations in Claim 14 that blood vented from the interior of the heart flows in the vented blood inlet and is filtered in the vented blood filtering unit and that blood suctioned from the outside of the heart flows in the suctioned blood inlet and is filtered in the suctioned blood filtering unit are recitations of intended use. Examiner Deak also took the same position with respect to the recitations in Claim 27 reciting that the blood vented from the interior of a heart flows in the vented blood inlet which communicates with the vented blood filtering chamber and that the blood suctioned from outside the heart flows in the suctioned blood inlet which communicates with the suctioned blood filtering chamber. That is, Examiner Deak commented that the inlet 32 (or inlet 34) disclosed in *McBride* could be used to receive blood vented from the interior of the heart and that the inlet 34 (or inlet 32) disclosed in *McBride* could be used to receive blood suctioned from outside the heart, with the blood flowing into the respective chambers in the reservoir.

The undersigned pointed out though that even if one were to use the inlet 32 (or inlet 34) disclosed in *McBride* to receive blood vented from the interior of the heart and even if one were to use the inlet 34 (or inlet 32) disclosed in *McBride* to receive blood suctioned from outside the heart, the reservoir described in *McBride* would still not include the combination of features recited in Claims 14 and 27. That is because Claim 14 recites that the reservoir comprises a vented blood filtering unit having a vented blood filtering member to filter the vented blood flowing in through the vented blood inlet; and a suctioned blood filtering unit having a suctioned blood filtering member to filter the suctioned blood flowing in through the suctioned blood

inlet. Claim 27 recites that the reservoir comprises a vented blood filtering chamber communicating with the vented blood inlet and formed at least partially by the filtering member which filters blood, and a suctioned blood filtering chamber communicating with the suctioned blood inlet and formed at least partially by the filtering member which filters blood. As explained during the interview, *McBride* specifically describes in connection with the illustration in Fig. 9 that only the blood entering the reservoir by way of the inlet 32 flows through a filter member 152. That is, the blood entering the inlet 34 does not flow through a filter member. Thus, even if one even if one were to use the inlet 32 (or inlet 34) disclosed in *McBride* to receive blood vented from the interior of the heart and even if one were to use the inlet 34 (or inlet 32) disclosed in *McBride* to receive blood suctioned from outside the heart, the reservoir described in *McBride* lacks a filter member for the blood that enters the inlet 34. Thus, as agreed by Examiner Deak, Claims 14 and 27 are also patentably distinguishable over the disclosure in *McBride*.

The last point discussed during the interview involved minor wording changes to Claims 14 and 27 regarding certain claim wording, namely the phrases "for filtering," "is capable of contacting" and "can pass." Examiner Deak indicated that the medical technology area prefers terminology such as --is configured to filter--, --contacts-- and --passes--. Those changes have been made to Claims 14 and 27 and do not narrow the claim scope as they merely recite in a different manner that which was previously set forth. Also, a minor typographical error has been corrected in Claim 14 to change the term "vented" to –suctioned—in the portion of the claim reciting the suctioned blood filtering unit.

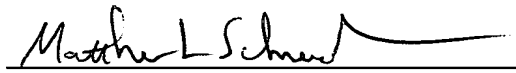
For at least the reasons discussed during the interview and as set forth above, it is believed that this application is in condition for allowance and such action is earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: December 9, 2004

By: 
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